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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,709	09/07/2000	Annika Bjore	3525-96	6411
7:	590 08/08/2002			
Nixon & Vanderhye			EXAMINER	
1100 North Gle Arlington, VA	ebe Road 8th Floor 22201-4714		BERCH, MARK L	
			ART UNIT	PAPER NUMBER
			1624	160
			DATE MAILED: 08/08/2002	$\mathcal{O}_{\mathcal{J}}$

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
•	09/623,709	BJORE ET AL.				
Office Action Summary	Examin r	Art Unit				
•	Mark L. Berch	1624				
The MAILING DATE of this communic			<b></b>			
Period for Reply						
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIO - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commu- - If the period for reply specified above is less than thirty (30) - If NO period for reply is specified above, the maximum stath - Failure to reply within the set or extended period for reply volume. - Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	CATION.  of 37 CFR 1.136(a). In no event, however, may unication.  of days, a reply within the statutory minimum of cutory period will apply and will expire SIX (6) Novill, by statute, cause the application to become	v a reply be timely filed thirty (30) days will be considered timely. IONTHS from the mailing date of this communication ABANDONED (35 U.S.C. § 133).	n.			
1)⊠ Responsive to communication(s) file	nd on 12 June 2002					
	b) This action is non-final.					
· <u> </u>	<i>,</i> —	natters, prosecution as to the merits	io			
closed in accordance with the practi						
4) Claim(s) <u>1-14 and 20-27</u> is/are pend	ing in the application.					
4a) Of the above claim(s) is/are	e withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) 1-14, 20-27 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restrict	ion and/or election requirement.					
Application Papers						
9) The specification is objected to by the						
10)☐ The drawing(s) filed on is/are: a	a)☐ accepted or b)☐ objected to b	y the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to	by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim to	for foreign priority under 35 U.S.(	Σ. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority d						
2. Certified copies of the priority d		<del></del>				
<ul> <li>3. Copies of the certified copies o application from the Interna</li> <li>* See the attached detailed Office action</li> </ul>	itional Bureau (PCT Rule 17.2(a)	).				
14) Acknowledgment is made of a claim for	r domestic priority under 35 U.S.	C. § 119(e) (to a provisional applicati	ion).			
a) ☐ The translation of the foreign lang			·			
Attachment(s)	, , ,					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PT 3) Information Disclosure Statement(s) (PTO-1449) Page	O-948) 5) Notice	ew Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)				
· Political Transfer of the Community of						

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## DETAILED ACTION

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14, 20-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter • which applicant regards as the invention.

- "Protected" against what? These are final products, so what is there to protect
  against? As there is no such thing as a universal protecting group, correct selection
  of a protecting group requires some knowledge of what is being protected against.
- 2. There still remains original point 4. The traverse is unpersuasive. While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The meanings quoted by applicants are not the usual meaning at all. Alkyl is a group of the formula -C<sub>n</sub>H<sub>2n+1</sub>, as is set forth in such sources as Hack's Chemical Dictionary and Hawley's Condensed Chemical Dictionary, or any textbook of organic chemistry. As such it cannot have unsaturation, rings or oxygen atoms present. Note that some alkyl groups with

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oxygen in the chain can be covered by alkyl substituted by  $C_{14}$  alkoxy, but the claim 2 language is broader than that.

- 3. There still remains original point 8. The traverse is unpersuasive. Applicants state that the claim language would be understood, but fails to state just what that understanding would be. Everyone who has a heart is susceptible to arrhythmia; there are no perfect body organs. If applicants do not intend everybody, who is intended?
- 4. There still remains original point 9 (but just for claims 22-24). Applicants statement that claims 22-24 are "completely independent of claim 21" is simply not true. These claims refer to claim 21 in their first line. That makes them dependent, and dependent claims must have all limitations of the claim on which these are dependent. If any material intended for claims 22-24 is not present in claim 21, the claims cannot properly depend.
- 5. Claim 26 is garbled, as it has a small amount of the original claim in brackets.
- 6. The phrase "in all cases" no longer makes a sense in claim 26, since there is only one case present.
- 7. There still remains original point 11 in part. Most matters have been fixed, but the formaldehyde still does not correspond to the  $R^2$  and  $R^3$  definitions. For example, if  $R^2$  and  $R^3$  = methyl, the one must use acetone. Formaldehyde will only produce  $R^2$  and  $R^3$  = H.
- 8. Claim 21 is now improperly dependent on claim on claim 1. See step l and m. The Noxide and quaternary ammonium and not protected forms.

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Claim 21 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for most aspects, does not reasonably provide enablement for the scope of (r). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The reasons were given previously; the traverse is unpersuasive. Enablement must cover the full scope of what is claimed. The claim covers converting the methyl to the ethyl or the nitro for example, and the specification does not teach how to do this, nor does one of ordinary skill in the art know how to do this. Applicants argue that it only covers the ones which can be done. That is not so. If claims were to be interpreted to cover only the scope which is actually enabled, then there would be no such thing a claim which lacks enablement for such scope. The PTO does not read unexpressed limitations into the claims, In re Kebrich, 96 USPQ 411, 413. Similar is In re Winkhaus, 188 USPQ 129. If the claim language is written so broadly as to cover any named groups converted into any other, that is what must be enabled. When operativeness has been properly challenged, it is incumbent on applicant to limit the claims accordingly, cf. In re Harwood, 156 USPQ 673, In re Cook, 169 USPQ 298, In re Langer, 183 USPQ 288, In re Corkill, 226 USPQ 1005, 1009, and In re Rainier, 153 USPQ 802.

Claims 1-14, 20-26 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for other forms, does not reasonably provide enablement for solvates. The specification does not enable any person skilled in the art

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to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The claims now recite solvates. But the numerous examples presented all failed to produce a solvate. These cannot be simply willed into existence. As was stated in *Morton International Inc. v. Cardinal Chemical Co.*, 28 USPQ2d 1190 "The specification purports to teach, with over fifty examples, the preparation of the claimed compounds with the required connectivity. However ... there is no evidence that such compounds exist... the examples of the '881 patent do not produce the postulated compounds... there is ... no evidence that such compounds even exist." The same circumstance appears to be true here: there is no evidence that solvates of these compounds actually exist; if they did, they would have formed. Hence, applicants must show that solvates can be made, or limit the claims accordingly.

## Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14, 20-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of

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copending Application No. 09/623705. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is no patentable distinction between the two cases. 09/623705 differs because it has an extra methyl group attached any one of several locations.

Compounds that differ only by the presence or absence of an extra methyl group or two are homologues. Homologues are of such close structural similarity that the disclosure of a compound renders prima facie obvious its homologue. As was stated in In re Grose, 201 USPQ 57, 63, "The known structural relationship between adjacent homologues, for example, supplies a chemical theory upon which a prima facie case of obviousness of a compound may rest." The homologue is expected to be preparable by the same method and to have generally the same properties. This expectation is then deemed the motivation for preparing homologues. Of course, these presumptions are rebuttable by the showing of unexpected effects, but initially, the homologues are obvious even in the absence of a specific teaching to add or remove methyl groups. See In re Wood, 199 USPQ 137; In re Hoke, 195 USPQ 148; In re Lohr, 137 USPQ 548; In re Magerlein, 202 USPQ 473; In re Wiechert, 152 USPQ 249; Ex parte Henkel, 130 USPQ 474; Ex Parte Fischer 96 USPQ 345; In re Fauque, 121 USPQ 425; In re Druey, 138 USPQ 39. In all of these cases, the close structural similarity between two compounds differing by one or two methyl groups was itself sufficient show obviousness. See also MPEP 2144.09, second paragraph.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark L. Berch whose telephone number is 703-308-4718. The examiner can normally be reached on M-F 7:15 - 3:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mukund Shah can be reached on 308-4716. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 708-308-1235.

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Mark L. Berch Primary Examiner Art Unit 1624

August 6, 2002